



Monthly Drought Update
August 12, 2014
San Luis Obispo County

Note: Information provided in this update varies by date.

CURRENT CONDITIONS

U.S. Drought Monitor Status:

The latest U.S. Drought Monitor report released July 31, 2014 indicates San Luis Obispo County remains at the **D4 – Exceptional Drought intensity rating**. All of California is at a level D-2 Severe Drought or worse with more than 58 percent of the state in a D4 – Exceptional Drought rating.

San Luis Obispo County Precipitation Totals (in inches):

Community	Rainfall Total Received From Last Update (7/1/2014 to 7/28/2014)	Rainfall Last Year (7/1/13 to 6/30/14)	Avg. Annual Rainfall	% of Avg. Annual Rainfall
Nipomo South (730)	0.00	4.65	16.00	29%
Lopez Dam (737)	0.00	8.62	21.00	41%
SLO Reservoir (749)	0.00	8.50	25.00	34%
Los Osos Landfill (727)	0.00	6.81	20.00	34%
Cambria (717)	0.00	7.01	22.00	32%
Rocky Butte (703)	0.00	11.85	39.00	30%
Santa Margarita (723)	0.00	8.62	26.00	33%
Salinas Dam (719)	0.00	7.44	23.00	32%
Atascadero (711)	0.00	5.67	18.00	32%
Templeton (762)	0.00	6.22	14.70	42%
Paso Robles (city)	0.03	6.13	14.33	43%
Hog Canyon (709)	0.00	3.98	16.00	25%

Source: www.slocountywater.org County of San Luis Obispo-City of Paso Robles Website

Near-term Outlook for Precipitation:

Monsoonal moisture has been present off and on in recent weeks although thus far only a few sprinkles have been produced. The higher humidity during these periods has dampened the fire danger somewhat and fortunately, lightning has been nearly absent in SLO County this summer. Precipitation is expected to remain below average and San Luis Obispo remains among the worst County in this category in the western U.S.

Reservoir Levels (% of capacity):

Note: Historical averages calculated using data from the following time frame:

Nacimiento: 1959 – 2013; Lopez: 1994-2013; Salinas: 1987-2013; and Whale Rock: 1985-2013.

Reservoir	% of Capacity	Current Acre Feet Storage	Updated
Nacimiento	19%	70,505	7/24/2014
Lopez	50%	24,521	7/28/2014
Salinas	29%	6,882	7/25/2014
Whale Rock	50%	19,575	7/23/2014

Source: www.slocountywater.org County of San Luis Obispo

STATE WATER

Status: The Department of Water Resources (DWR) continues to deliver State Water “Carryover” water for 2014 and DWR has increased its allocation for South of Delta Service Contractors from 0% to 5%. The Flood Control District is maximizing State Water deliveries to Zone 3 agencies.

Actions: The Public Works Department continues to coordinate with DWR regarding State Water Deliveries. Discussions are taking place regarding the Chorro Valley institutions and long-term drought planning if State Water deliveries decrease in 2015 and/or a shutdown of the system.

VULNERABLE WATER SYSTEMS

There have been no new updates regarding vulnerable water systems throughout the county since the July 15, 2014 report.

County Service Areas (CSA's):

Santa Margarita (CSA 23)

- Drought response level remains at ALERT status.
- Primary pumping is from shallow well No. 4. Deep well No. 3 is available for use if needed to supplement well No. 4.
- An emergency water supply project connecting Santa Margarita to Atascadero Mutual Water Company is being pursued through the Integrated Regional Water Management (IRWM) drought expedited implementation grant process. The board approved this project on June 17, 2014 to be included in the IRWM drought grant application.

Shandon (CSA 16)

- Two wells currently provide all water to the Shandon community.

Cayucos (CSA 10A)

- Supply is available from Whale Rock and one on - site well. Staff has given a presentation to the Advisory Committee and business groups regarding conserving this supply.

Avila Valley (CSA 12)

- Adequate supply is available from Lopez and State water “carryover” water sources for this year.

Chorro Valley Institutions (CMC, Animal Services, Sheriff, County Operations, Camp San Luis, Cuesta College, County Office of Education):

- 2014 State water carryover water is available and being provided.
- An interconnection between the existing Nacimiento Water Project pipeline and the existing Salinas pipeline is being pursued through the State's drought emergency funds. The board approved this project on June 17, 2014 to be included in the IRWM drought grant application.
- The existing distribution system is being evaluated to assure water losses are minimized.

Non-County Operated:

City of Morro Bay

Status: Emergency inter-tie with Chorro Valley and desal permit.

Cambria Community Services District

Status: Emergency San Simeon Creek Brackish Water Supply Project-Started Construction.

San Simeon Community Services District

Status: Proposed recycled water project part of June 17, 2014 IRWM drought application.

Heritage Ranch Community Services District

Status: The Nacimiento River is the only available water source for the community of Heritage Ranch. The emergency inter-tie agreement between the Flood Control District and the CSD was part of June 17, 2014 drought application.

Rural Paso Robles residents

Status: Continue to identify water trucking options and outreach efforts.

IMPACTS

Agricultural Impacts:

University of California Cooperative Extension (UCCE) Agricultural Producer Survey

The UCCE agricultural producer survey continues to seek input about the effects of the drought on the local agricultural industry. The monthly survey is sent to producers, local agricultural organizations and

UCCE Farm Advisors representing a wide variety of crops and livestock providing a good picture of on-the-ground conditions and impacts from the drought.

The latest survey results indicate agricultural conditions continue to deteriorate due to lack of moisture. The input below is paraphrased from comments collected by the survey, but indicates an increasing level of concern.

Livestock producers are reporting that conditions are the same or worse. Water availability or quality has changed in the past 60 days. None of the livestock industry respondents indicated that employees had been laid off, and one noted that economic impacts would depend on whether other sources of income were available. When asked about the impacts of another low rainfall year, producers responded that it would be devastating for SLO County, and for California, in terms of availability of water and forage.

Avocado growers continue to “stump” or cut trees back. Availability or quality of water has changed in the past 60 days. Harvests are occurring earlier than normal because of the warm weather conditions and some growers are waiting to stump trees until after fruit is harvested. Some growers have had to lay off employees. Continued drought would result in growers losing trees or going out of business.

Nursery and Vegetable producers indicated that conditions are unchanged or worse. Water availability or quality has changed in the past 60 days. Quality issues of final products associated with lack of adequate irrigation water and increased salinity in the rootzone are developing. Another dry year would be catastrophic for some in these industries as additional ground would have to be idled potentially leading to unemployment issues.

Grape growers are finding that conditions are unchanged or worse. Water availability or quality has changed in the past 60 days. Another dry year would shift conditions from a crisis to a disaster.

Dr. Bill Tietje, UCCE Oak Rangelands Specialist, notes that trees and wildlife continue to be severely impacted by the current drought. Some oak trees, especially those on sites with shallow soils and south exposure, are dying. Many wildlife populations have reduced recruitment. This will affect money received from hunting licenses and income from hunting programs on ranches. The Cooperative Extension Office continues to receive calls regarding Valley Oaks. Large Valley Oaks have a predilection to drop limbs and perhaps for the whole tree to drop. The theory, related by Jack Foott, former Extension Horticulture Advisor in San Luis Obispo, is that on hot, dry summer days a Valley Oak will close its stomata to conserve water while its roots continue to soak up what water they can. This causes water to build up in the trunk and limbs. Apparently, the extra weight can cause limbs (and maybe the whole tree) to break, by some reports as though the tree “exploded”. This agrees with recent literature on the topic, albeit no cause-and-effects study has been done. Dr. Tietje notes that from an evolutionary perspective, perhaps dropping limbs is the valley oak’s strategy for protecting its seedlings. Seedlings are more likely to grow up when growing among dead limbs than if out in the open. This phenomenon is more prevalent during this drought.

Fire Danger:

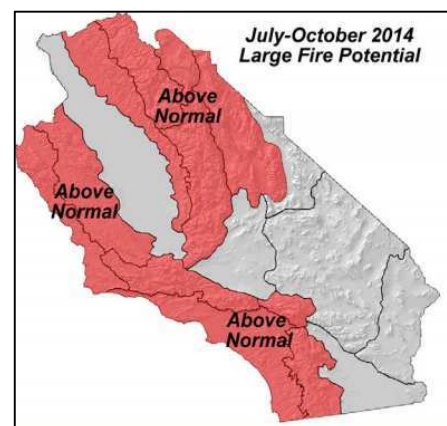
Fire Danger

As shown in the illustration to the right, forecasts indicate the County of San Luis Obispo will have an above normal large fire potential from July to October. To date, CAL FIRE has responded to **3,562 fires** across the State since January 1, burning **37,840 acres**. This year’s fire activity is well above the year-to-date average of 2,619 wildfires and 34,192 acres burned. This past week, CAL FIRE responded to over 200 new wildfires.

Live Fuel Moisture (LFM)

(LFM is the moisture content of live vegetation expressed as a percentage of the oven-dry weight.)

The normal downward summer trend continues and in most areas, LFM is at or near historical lows. Many deciduous shrub species such as black sage and poison oak received enough moisture this spring to undergo a growth cycle. The new foliage produced during this growth cycle is now dead and has significantly increased the amount of dead flashy fuel ready to burn.



Dead Fuel Moisture

(The moisture content of dead organic fuels is another important component of the relative fire danger. As with LFM above, dead fuel moisture levels are a good indicator of how likely fuels are to ignite and how intensely they will burn. 100-hr fuel refers to vegetation between 1 and 3 inches in diameter and 1000-hr fuel is 3-6 inches. When the fuel moisture content is low, fires start easily and will spread rapidly.)

Currently, dead fuels are above historical lows but well below average.



Temperatures/Relative Humidity (RH)

Monsoonal influences in July increased relative humidity and cloud cover during some periods. Above average temperatures occurred on roughly half of the days in July. Hot weather contributes to higher fire danger on a daily basis while also increasing the cumulative drying of the live and dead fuels, thereby increasing the fire danger.

Energy Release Component (ERC)

(ERC is an index related to how hot a fire could burn. It is directly related to the 24-hour, potential worst case, total available energy (BTUs) at the head of a fire. The ERC can serve as a good characterization of fire season as it tracks seasonal fire danger trends well. ERC has low variability, and is the best fire danger component for indicating the effects of intermediate to long-term drying on fire behavior.)

Currently, ERC values are well above average approaching record high levels.

Economic:

Drought-related job losses are continuing to increase across the state. The State's Labor & Workforce Development Agency requested that all local workforce boards provide real time information on the workforce impacts of the drought. As such, the Department of Social Services, on behalf of the San Luis Obispo County Workforce Investment Board, is collecting information from local employers to collect the number of layoffs, business closures, and Rapid Response actions occurring in our local area. To date there have been no reported business closures or reduction in workforce to report from the current network of individuals in San Luis Obispo County. The Department of Social Services is currently exploring options for collecting the data.

STATE & FEDERAL KEY ACTION ITEMS FROM LAST MONTH

State Water Board: Mandatory Water Conservation

On July 29, 2014, an emergency regulation to increase conservation practices for all Californians went into effect. The new conservation regulation targets outdoor urban water use. In some areas of the State, 50 percent or more of daily water use is for lawns and outdoor landscaping. With this regulation, all Californians are expected to stop: washing down driveways and sidewalks; watering of outdoor landscapes that cause excess runoff; using a hose to wash a motor vehicle, unless the hose is fitted with

a shut-off nozzle, and using potable water in a fountain or decorative water feature, unless the water is recirculated. The regulation, adopted by the State Water Board July 15, and approved by the Office of Administrative Law July 28, mandates minimum actions to conserve water supplies both for this year and into 2015.

Economic Loss Loans

Cal OES is reminding local agencies that the U.S. SBA has economic loss loans available to non-agriculture businesses that have lost business and revenue due to the drought. County OES is sending out a reminder news release and social media messaging locally and posting the information on their web site.

COUNTY DROUGHT TASK FORCE KEY ACTION ITEMS FROM LAST MONTH

County Office of Emergency Services:

San Luis Obispo County OES continues to provide weekly drought situation reports situation through the State's online reporting system and through ongoing weekly conference calls.

Learning Event

On Thursday July 17, 2014, local and state agencies participated in an Immediate Water Shortage Learning Event: A Table Top Discussion Exercise. Participating agencies included the Department of Water Resources, State Water Quality Control Board, California Water/Wastewater Agency Response Network, Cal OES, Cal Fire, County Public Works, Public Health, County Agriculture, Oceano CSD, Cambria CSD, Templeton CSD, Atascadero City, Atascadero Mutual Water District, City of Paso Robles, Fire Cities Fire Authority, Camp Roberts, PG&E Diablo Canyon, American Red Cross, and County OES. The event simulated a number of scenarios such as a local community running out of water with the purpose to help those within the San Luis Obispo County Operational Area in understanding local and state resources and authorities and how to make emergency requests should sudden events occur related to the loss of water.

Local Coordination

County OES reached out directly to local special districts water purveyors and cities to gather additional cost information related to the drought. Cal OES is gathering cost information from all counties. If statewide costs reach a certain threshold the state may qualify for federal disaster funding. At this time, Cal OES would request that the President make a federal drought disaster declaration.

Emergency Actions:

Cambria Community Services District (CSD) notified County OES that a monitoring well had dropped below the three foot level. Due to permitting issues, once the well drops below the three foot level the CSD is required to stop using a well downstream that is currently being used for community water supply. The CSD submitted a petition to the State Water Resources Control Board requesting a waiver to be allowed to drop the monitoring well level to two feet. County OES contacted Cal OES requesting assistance with getting the waiver request approved as soon as possible. County OES sent a request to Cal OES, which was sent up to Cal OES headquarters. Cal OES in turn worked with two State agencies to help with expediting the request.

County Facilities Usage & Conservation Actions:

General Services Agency has taken the following actions:

- Fixture Replacement: To date, a total of 29 buildings have been retrofitted with low-flow fixtures, saving an estimated 2,500 gallons per week.
- Water Audit: Water audit site visit was conducted in July with focus on water efficiency opportunities County facilities, parks, and golf. The report is currently under review by staff.
- Energy and Water Manager Professional Services Contract: Proposals for Energy and Water Manager professional services contract were received, negotiations are in progress, and it is estimated that a contract will be awarded in September.

Drought Contingency Planning:

County Health, the Public Works Department, and CAL FIRE/County Fire continue to develop plans to ensure there is adequate supply of water for firefighting and domestic water use in the event that a community does not have enough water. A request to complete a drought survey has been sent to 150 small public water systems (199 service connections or fewer) regulated by Public Health. To date, 85 small public water systems have completed the survey. The result of each survey received has been

Attachment 1

categorized into three categories; Watch, Vulnerable, and Critical. The information from the 85 systems has been placed into a GIS map for contingency planning. Public Health continues to work on obtaining data for the remaining water systems that have not returned the survey.

County Public Outreach Actions:

The Public Works Department continues to work with agencies affected by the drought and provide educational presentations to interested parties. Conservation mailers have been sent to retail customers.

In an effort to raise awareness about water supply issues and communicate the call for a 20% voluntary reduction in water usage, the County continues to examine multiple channels of communication for water conservation outreach efforts. As previously reported, the task force is currently examining the following tools to communicate the importance of water conservation.

- Tool #1: Local Collaboration
- Tool #2: Website Marketing & Social Media
- Tool #3: Water Purveyor Outreach (use water bill as the first-line educational tool)
- Tool #4: Public Service Announcements (PSAs)
- Tool #5: News Media
- Tool #6: Advertising

DROUGHT RELATED WEBSITES FOR MORE INFORMATION

State's Water Conservation Campaign; Save our Water (www.saveourh2o.org)

California's Drought Information Clearinghouse; Drought.CA.Gov (ca.gov/drought/)

California Department of Food and Agriculture; Drought information (www.cdfa.ca.gov/drought/)

California Department of Water Resources; Current Water Conditions (www.water.ca.gov/waterconditions/drought/)

California State Water Resources Control Board; Water Rights, Drought Info and Actions

(www.swrcb.ca.gov/waterrights/water_issues/programs/drought/index.shtml)

California Department of Public Health; Drinking Water CDPH Drinking Water Program

(www.cdph.ca.gov/programs/pages/dwp.aspx)

USDA Disaster and Drought Assistance Information; USDA Programs

(usda.gov/wps/portal/usda/usdahome?navid=DISASTER_ASSISTANCE)

UC Cooperative Extension Drought Information Resources; Drought Information Resources;

cesanluisobispo.ucanr.edu/Drought_Information/